Container and ro-ro trailer capacity to soar in North Sea Region ports

In order to meet increasing demand in the coming years, ports in the North Sea Region have embarked upon ambitious expansion plans, both with respect to container terminal capacity as with respect to ro-ro trailer handling capacity.

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Most North Sea Region ports will be able to accommodate container traffic volumes up to 2010.

The recent draft Research Paper "Major Intermodal Ports in the North Sea Region", written within the context of the SUTRANET-project, gives a detailed overview of the container and ro-ro throughput of ports belonging to the North Sea Region, as well as their expansion plans up to the year 2010. The geographic region considered broadly encompasses ports in Belgium, the Netherlands, Germany, Denmark, Sweden, Norway and the UK (North of the River Thames). Hence, the important ports of Southampton, Le Havre and Dunkirk are not taken into account. Moreover, only those ports with a container throughput of at least 100,000 TEU or 50,000 ro-ro trailers were considered (i.e. (new) vehicle traffic was excluded from the analysis). In all, this resulted in a total sample of some 25 individual ports.

As far as container throughput is concerned, these 25 ports had a combined throughput of 27.88m TEU in 2003. The mainports of Rotterdam, Hamburg and Antwerp accounted for 18.73m TEU or about two thirds of total throughput. With respect to infrastructure and superstructure, the 25 ports offered a total quay length of 46.60 km and 286 container quay cranes, respectively. Not surprisingly, Rotterdam, Hamburg and Antwerp take up the lion's share of the current infrastructure (31.81 km or 68% of total quay length) and superstructure (177 cranes or 62%). In fact, these top-three ports rank well above the ports of Bremerhaven and Felixstowe.

With respect to the near future, a combined container handling capacity of nearly 30 million TEU is expected to be added in the 25 ports considered, which is slightly more than their combined throughput in 2003. Hamburg and Antwerp take up the lion's share with capacity expansions of 7.30m and 7.25m TEU respectively, which is well above the capacity expansions planned at Bremerhaven/Wilhelmshaven (4.90m TEU), Rotterdam (3.50m TEU) and Felixstowe/Harwich (3.20m TEU). In all, these expansion plans should enable most North Sea Region ports to accommodate container traffic volumes up to 2010.

The picture is somewhat different for ro-ro trailer traffic. The 25 ports considered offered a combined capacity of 110 berths for ro-ro trailers in 2003. The most important ports were Zeebrugge and the so-called Humber ports (Hull, Immingham and Killingholme) with 16 berths each, followed by Gothenburg (11 berths), Rotterdam (11 berths) and the Haven ports (Felixstowe, Harwich and Ipswich – 10 berths). Between them, these nine ports accounted for 64 ro-ro trailer berths, with the remaining 16 ports offering just 46 berths. As far as throughput is concerned, the study assumed that one ro-ro trailer equals 2 TEU, resulting in a total throughput of 8.09m TEU for the entire ports sample. The lion's share was handled by Zeebrugge (2.13m TEU), Rotterdam (1.69m TEU) and the Haven ports (1.06m TEU).

With respect to the near future, a further 19 ro-ro trailer berths are expected to be added by the year 2010, i.e. nearly 20% of the current number of berths. The expansion plans are heavily focused on ports in the area between the Haven, Humber, Rhine and Scheldt rivers, with a total of 17 new berths scheduled to be added in the coming years.

For a detailed overview of the different NSR ports' expansion plans with respect to container and ro-ro trailer traffic, the reader is referred to www.sutranet.org .

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North America and Europe dominate global airline network

At present it is well established that major airlines have adopted the hub-and-spoke model as their primary strategy for organizing route structures. One of the research studies accompanying the rise of hub-and-spoke networks focuses on the detection of these networks within the global airline network. This article aims to contribute to this literature by presenting an empirical analysis of the spatiality of some major airline hubs by using the new and previously untapped airline database MIDT.

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Most important hubs in spatial terms

HUBS	CONNECTIONS	PERCENTAGE OF CITIES IN OWN REGION
Chicago (IL)	168	72.6
Atlanta (GA)	163	73.0
London	162	40.7
Frankfurt	161	41.6
Amsterdam	158	45.6
Paris	132	49.2
Dallas (TX)	127	76.4
New York (NY)	123	48.8
Houston (TX)	122	68.9
Zurich	111	55.0
Detroit (MI)	107	82.2
Los Angeles (CA)	100	58.0

Infographics DL

Because of the lack of readily available data of actual routes in the global airline network, standard data sources (e.g. IATA, OAG, AEA) are ill-suited for identifying the hub-and-spoke network. Despite the interesting insights that can be derived from these sources, it can equally be noted that they are not very well geared towards a systematic analysis of global (i.e. worldwide) airline connections. There are five important limitations: implicit state-centrism in the data; lack of comparability between different data sources; information biased through the use of selected carriers; lack of knowledge about the specific use of an airport (hub/origin/destination); use of proxy variables such as scheduled flights or services.

We will therefore use a new and previously untapped data source, the so-called 'Marketing Information Data Transfer' (MIDT) database, which does not suffer from these drawbacks. The MIDT database contains information on airline bookings made through so-called Global Distribution Systems (GDS), which are electronic platforms used by travel agencies to manage airline bookings, hotel reservations and car rentals. The MIDT database summarizes the airline bookings made through these GDS. For every booking, the database contains information on airline codes, flight numbers, board on/off cities, switching points, booking date, departure date, agency name, cancellation indicators, and so on. Our MIDT database, that covers the period January-August 2001, gives information on a total of 3,753,100 trips, representing the movements of 547,410,397 passengers. To know more about MIDT, contact Frank Witlox (frank.witlox@ugent.be).

ANALYSIS

This analysis focuses on the number of city-pairs connected by a network node: a city is considered to be an important hub when it connects a large amount of city-pairs (with a threshold of 10,000 passengers). Table 1 gives the number of connections for all cities that connect more than 100 city-pairs, whereby the last column features the percentage of connections in the own region. This table suggests that cities located in North America and Europe are the major hubs in the global airline network. With the exception of New York and Chicago, most US hubs have a regional function. This contrasts with the spoke flights at European hubs, which have a larger portion of interregional connections.

We have studied the spatiality of two important US hubs: New York and Charlotte. New York functions as hub for more than 100 city-pairs, Charlotte for less than 100. The most important origin/destination cities of New York are largely confined to Europe and North America. The spatial pattern of this city is in other words interregional. The major US hub Charlotte, in contrast, has a specific regional character. Charlotte's most important non-US connections are Nassau (ranked 28), Toronto (ranked 37), and San Juan (ranked 52). So this shows that the two hub cities, which are both known as very important hubs, have a totally different strategy in the global hub-and-spoke network.

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OFFICIAL NOTICE

MSC: BAF Canary Island service

Mediterranean Shipping Company wishes to inform the trade that above surcharge will change on the Canary Islands Trade effective 04/06/06 as follows: +37,90%. First vessel of application will be: m/v MSC Aniello V544A sailing from Antwerp on 06/06/06.

Australian/ New Zealand service

Please note that above surcharge will change on the Australian/New Zealand Trade effective 15/06/2006 as follows: USD 375 per TEU. First vessel of application will be: m/v MSC Sardinia V35A sailing from Antwerp on 18/06/2006.

SAEC to NWC & Scandinavia trade

Please note that BAF for SAEC to NWC & Scandinavia trade will be increased from USD 330.- x TEU to USD 400.- x TEU as from following vessels: MSC Suez 029r, MSC Serena 032r, MSC Antonia 375r
For any further information, please contact MSC Belgium N.V., tel: +32 3 543 22 00.